CITY OF BEVERLY
DEPARTMENT OF PUBLIC SERVICES AND ENGINEERING
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July 14, 2012

United States EPA
New England Region
5 Post Office Square, Suite 100
Boston, MA 02109-3912
Attn: George Harding, P.E.

RE: RFI 12-308-30

Dear Mr. Harding,

In this letter and the various attachments I am providing the best available information to answer the request for information dated June 14, 2012 and received June 18, 2012.

I will use the same numbering as in the request and try to be clear regarding association of the many documents.

1. Attached is a key map of the entire storm water system of the City of Beverly. It is difficult to convey the information on a paper map at an adequate scale. A larger map can be provided if necessary or I could provide it electronically.
2.
   A. Virtually all catch basins are cleaned by contractors. A very small number are cleaned by City forces in course of normal maintenance.
   B. All catch basins are cleaned annually. Our goal is to sweep every street three times annually but the downtown district is swept twice per week during non-winter months.
   C. This is also the response to (D.) Street sweeping is dumped directly from the sweeper into a bin that is on a paved surface and has concrete blocks several feet high on three sides. This is also the same bin houses catch basin grit. In the past, the individual trucks would dump grit on the paved surface and we would use a front end loader to push the material up several times a day. The nearest catch basin has had filter fabric installed under the grate to prevent migration of fines and the next closest basin is more frequently cleaned by vacuum truck. Since last year we have

moved the immediate storage of wet catch basin grit to a holding bin that is more remote and we have installed an eight-inch berm at the end of the bin. This allows the material to dry and become more stable. We periodically move the dry debris to the other bin for storage before ultimate disposal. Any truly wet debris or sanitary sewer cleanings is disposed of at our regional treatment plant in an indoor transfer facility where it is housed until it is disposed of at a landfill.

Each day we operate a street sweeper the entire DPW facility is swept to remove loose debris this preventing migration into the drains. Typically we store less than 500 yards of debris on site but the last few years have proven very difficult to dispose of the debris. I will discuss this more in the response to question 4. From the time of collection to disposal is ideally less than 6 months. That has not been the case in the last few years, which will be discussed later. As part of a recent conservation commission filing by the city for nearby dredging project we offered, and it was made part of the order of conditions, that we install storm water quality devices on our property to ensure the protection of storm water quality. The devices will be installed within the next six months. We also made covering the storage bins with permanent covers a part of the order of conditions.

Once we complete cleaning catch basins for the season we seek pricing to dispose of the debris. In 2008 we obtained a statewide Beneficial Use Determination to dispose of our material in lined and unlined landfills as daily cover or grading and shaping material. In keeping with that BUD we test the material and then find a suitable disposal facility.

3. An 11x17" map has been provided showing the DPW facility that houses our entire operation. The areas in question are labeled. The contour interval is 2 feet.
4.
   A. Copies of logs and invoices for disposal are attached and we don't know accurately until we dispose of the material but to summarize:
      2008 approx. 800 tons or 600-800 yards depending on unit weight
      2009 approx. 800 tons or 600-800 yards
      2010 approx. 800 tons or 600-800 yards
      2011 approx. 800 tons or 600-800 yards
      2012 182.27 tons as of July 3, 2012
   B. The answer for this is the same as above since all material collected is transported to the yard.
   C. It appears our largest inventory was 1686.8 tons in late 2009 and early 2010. While we have not calculated the unit weight I would estimate it to be similar to sand or about 1.4 tons per cubic yard. This gives us a volume of around 1200 yards but 1400 at most.
   D. The material is always disposed of via our BUD into the appropriate landfill.
   E. Prior to 2008 we were able to dispose of material easily at our local landfill and never had more than a few hundred yards on hand for more than a few months. That landfill changed owners and we are no longer able to contact them despite repeated attempts. Since the fall of 2008 when we got our BUD we have disposed of the

material in January and May of 2010 when we transported 1686.8 tons of material to the Ward Hill Ash Monofill operated by Veolia. It was very difficult to find this landfill and we had contacted them ourselves but were told they would not accept our waste. The next closest facility is Dartmouth but that is logistically very difficult to get to for us. One of our consultants was eventually able to arrange disposal at the Ward Hill facility.

We thought we had a reliable site but the next fall after cleaning our basins we were not able to arrange disposal at Ward Hill site. We had reason to believe that we would be successful and continued to try to make arrangements throughout the winter. This facility does close during winter months. We were notified the next spring (2011) that they were not going to open the landfill again and we immediately started to explore other sites. Eventually we made connections with the Titcomb landfill in Amesbury and exchanged paperwork with them to dispose of the waste. The attached document log identifies the appropriate document for this facility. As you can imagine, nothing in the environmental world happens quickly but by July we were ready for transport. The morning of transport the facility operator realized that he could not accept catch basin grit and we literally had to turn the trucks around even though we met all of the analytical criteria.

We worked with our primary disposal contractor over the next few months to identify a new location to dispose of our debris. Our cleaning of catch basins was held off until July of 2011 as I did not want to begin until the yard was emptied out. The two events were supposed to coincide but the unexpected cancellation from Titcomb meant we started cleaning basins with our yard already filled with the previous year's debris. We did not anticipate the continued difficulty in finding a suitable facility since we were now accustomed to paying the much higher rates for disposal. Once again we made several calls to every landfill registered with MassDEP. Most did not answer or return calls. Eventually we ended up finding the manager of the Upton Landfill and have developed a relationship with them that has allowed us to easily dispose our waste as needed. Our LSP, Alliance Environmental Group, handles all testing of materials for us and coordinates paperwork for shipping.

F. The invoices for disposal are attached as indicated in the attachment log. We do not separate the two materials so there is only one log. We also pay only one vendor for both hauling and disposal.
G. I believe this is covered in the response (E), but if you have questions regarding the process, please ask me to clarify.
H. The lab results are attached. We use our LSP to conduct the sampling and to advise us on sample results. The logs contain all information such as type of sample and location but the pollutants we test for are dictated by our BUD. If the results are anything other than suitable for unlined landfill disposal, we consider our options. That has not been the case except in on recent round where a single sample came in high in lead. We chose to have the same sample tested again which showed the first test to be in error thus making the sample suitable for unlined disposal.

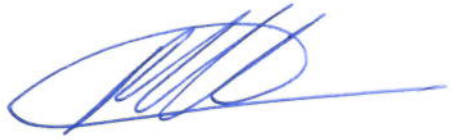
I. There is no free liquid in our debris that we can sample and we have not conducted any sampling of liquid. True liquid is either drained into our sanitary sewer system or transported directly to our regional treatment facility (south essex sewerage district.)

5. Our operation includes a working relationship with Solid Waste Solutions and Alliance Environmental Group to sample, analyze and transport our waste to appropriate disposal facilities in a timely manner. I believe we have overcome the supply chain challenges that have faced us in recent years. We emptied our yard last December and did not accumulate any new debris until this Spring. Any debris accumulated due to street sweeping was tested and removed this July to make room for summer catch basin cleaning and to ensure we would not have material on site for more than 180 days. Currently we have less than 50 cubic yards stored on site.

During our last few years of operation we have not had a problem containing the debris on site and have not experienced migration of sediment into the drainage system. The storm event of October 4, 2011 that resulted in widespread flooding was very localized and was nearly a 200 year 2-hour event. The storm caused flooding that has not been seen in over 100 years at our facility. The flood water reached a height that was equal to about the toe of the pile we had on site. When the water receded some of the debris was washed from the pile but since the closest basin had filter fabric under the cover it did not enter the drainage system. We surrounded the pile with hay bales and silt fence and removed the entire pile within the next few weeks. Since that time we have taken many steps as outlined above to improve our operation and have additional infrastructure improvements scheduled that will provide an even greater level of protection.

If at any time you need additional information please let me know. I am also available to meet with you to provide additional detail or clarification of the submitted documentation.

Thank you for your time.



Michael P. Collins, P.E.,
Commissioner of Public Services and Engineering

Attachment Log:

1. Key map of storm sewer network- Question #1
2. 11x17 map of DPW facility-Question #3
3. 2008 Communication discussing possible disposal sites-Question #4,g
4. 2009 contract for disposal of material-Question #4,g
5. Material Shipping Record for 2009 disposal-Question #4,g
6. Acceptance checklist for Titcomb landfill-Question #4,g
7. 2010 MSR for Titcomb Landfill ultimately not used Question #4,g
8. Communication with Titcomb 7-2011-Question #4,g
9. Communication with Casella Waste trying to arrange disposal 10-2011 Question# 4,g
10. Communication with Solid Waste Solutions 11-2011 Question #4,g
11. Disposal Totals for 2008-9. Question #4,f and 4,a
12. Invoice for 2008-9 disposal. Question #4,f and 4,a
13. Invoice for 2010 disposal. Question #4,f and 4,a
14. Communication, total and Invoice for 2011 Disposal. Question #4,f and 4,a
15. 2008-2011 invoices for catch basin cleaning. Question #2,a and b
16. 2008 BUD application and analytical results. Question #4,h
17. 2010 analytical results. Question #4,h
18. 2011 analytical results. Question #4, h
19. 2008 Beneficial Use Determination. Question #2,c